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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/747,781

12/29/2003

Frederick A. Jelley

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EXAMINER

BURCH, MELODY M

ART UNIT

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3657

MAIL DATE

DELIVERY MODE

04/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/747,781	Applicant(s) JELLEY ET AL.	
	Examiner Melody M. Burch	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 12-25 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8, 12-15 and 17-25 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☒ Claim(s) 1-8 and 12-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6, 8, 12-15, and 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6932198 to Trinh in view of US Patent 2521988 to McEachran.

Re: claims 1, 12-15, 18, 19, and 22-25. Trinh shows in figure 1 a self-energizing brake assembly comprising: a support 20 pivotally mounted at an angle relative to a rotatable brake member 12; and a friction member shown at the end of the lead line of element number 14 mounted relative to the support and slideable along said support between engaged and disengaged positions with the rotatable brake member to generate a braking force between said friction member and the rotatable brake member, wherein said angle of said support is variable for controlling a self-energizing gain in said braking force as disclosed in col. 6 lines 16-18 and 50-54.

Trinh is silent with regards to the friction member being pivotally mounted relative to the support (or in this case pivotally mounted to the base shown immediately to the right of the component shown at the end of the lead line of number 14.)

McEachran teaches in figures 1, 2, and 9 the use of a friction member 4 being pivotally mounted to a base 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the friction member mounting of Trinh to have included being pivotally mounted to the base such that the friction member was pivotally mounted relative to the support, as taught by McEachran, in order to provide a means for the friction member to better contact the surface of the rotatable member to improve braking capacity.

Re: claims 2 and 3. Trinh, as modified, teaches the use of a wedge immediately to the right of element 14 in figure 1 of Trinh.

Re: claims 4, 6, 17, 20, and 21. Trinh, as modified, teaches in figure 1 of Trinh an adjustable member 60 biasing the support toward the rotatable member under certain operating conditions.

Re: claim 8. Trinh, as modified, teaches in figure 1 of Trinh a drive actuator 60 to apply a force to the friction member by decreasing the angle between the rotatable brake member and the support.

Allowable Subject Matter

3. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 12/18/08 have been fully considered but they are not persuasive. Applicant argues that wedge member 20 is pivotally connected to the brake pad 14 with a pivot pin 22 and further maintains that there is no teaching that brake pad 14 with the friction element is slidable along the support. Applicant explains that since elements 14 and 20 are pivotally connected to each other at 22, the friction element 14 is incapable of being slideable along the support 20. Examiner disagrees. Trinh discloses in col. 4 lines 10-14 that pin 22 is coupled to the front position 9 of element 20. As Applicant pointed out, element 20 can rotate about the pin. This rotation is effectuated to change the angle 69 to provide a certain amount of self-energization. Examiner also notes that the friction element 14 is actuated to engage the rotor 12 by way of a motor controlling gear assembly 56. Column 5 lines 36-39 describe the way in which element 14 is actuated. The cited passage states that "motor 24 will selectively move the brake pad assembly 14 in an upward direction to apply a braking force and motor 24 will move the brake pad assembly 14 in a downward direction to reduce braking force." As shown in figure 1, with the support 20 being pivoted at a given angle 69 when motor 24 actuates friction element 14 to move in an upward direction, it is clear that friction element 14 will slide along the surface 9 of the support 20 and produce self-energized braking. Finally, Applicant suggests that new claims 23-25 define over the prior art of record. Examiner disagrees. Examiner maintains that Trinh shows in figure 1 the support 20 being pivotally mounted relative to the rotatable brake member 12 at a pivot 22 and that a frictional force generated between the friction member 14 and the

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rotatable member 12 moves the friction member (particularly the bottom portions of the friction member 14) upward along the support toward the pivot 22 which is in an upward position with respect to the lower portions friction member 14, as broadly recited.

Accordingly, the rejections have been maintained.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb

March 31, 2009

/Melody M. Burch/

Primary Examiner, Art Unit 3657